

Abstract of the Disclosure

ENGINE AIR CHARGE SYSTEM WITH BRANCH CONDUITS

Prior art air charge systems for 'V' configuration internal combustion engines use two turbochargers and two intercoolers, one for each bank of cylinders, and require relatively long and complex air ducts. The present invention provides a charge air system for a 'V' engine with two banks of cylinders. The system includes a compressor connected by a charge air conduit to a charge air cooler and a flow control valve in communication with first and second branch conduits, each adapted for connection to a bank of cylinders. A branch connector has one inlet in communication with the valve and two outlets in communication with the two branch conduits. The charge air conduit may be disposed in the 'V' between the two banks of cylinders. The system uses one compressor and one cooler, thereby reducing component and assembly costs for the engine and keeping air ducting relatively simple.